

# **EXHIBIT F**

# EXHIBIT 2

*Entropic Communications, LLC v. Cox Communications, Inc., et al.*  
Case 2:23-cv-01049-JWH-KES (C.D. Cal.)

**U.S. Patent No. 8,223,775 (the “’775 Patent”) Exemplary Infringement Chart**

Cox operates and maintains a nationwide television and data network through which it sells, leases, and offers for sale products and services, including the Technicolor CGM4981, Technicolor CGM4331, Technicolor CGM4141, Technicolor CVA4004, ARRIS / Surfboard TM3402, ARRIS / Surfboard G36, ARRIS / Surfboard G54, ARRIS / Surfboard S33, ARRIS / Surfboard CM8200, ARRIS / Surfboard G34, ARRIS / Surfboard SB8200, ARRIS / Surfboard DG2460, ARRIS TM9202, Hitron CODA56, Hitron CODA, Humax HGD310, Motorola B12, Motorola MB8611, Motorola MG8725, Motorola MB8600, Motorola MG8702, Netgear CM2000, Netgear C7800, Netgear CAX30, Netgear CAX80, Netgear CBR750, Netgear CM1000, Netgear CM1000v2, Netgear CM1100, Netgear CM1200, Netgear CM2500, Netgear CM3000, Ubiquiti UCI, ARRIS / Surfboard TG2472, ARRIS / Surfboard SBG7400AC2, ARRIS / Surfboard SBG7600AC2, Motorola MB7621, Motorola MG7700, Netgear C6900, Netgear C7000v2, Netgear C7500, Netgear CBR40, Netgear CM600, Netgear CM700, TP-LINK TC-7650, ARRIS / Surfboard SB6183, ARRIS / Surfboard SBG6900, Asus CM16, Motorola MB7420, Motorola MG7540, Motorola MG7550, Netgear C6230, Netgear C6250, Netgear C6300, Netgear C6300v2, Netgear CM500, TP-LINK TC-7620, TP-LINK CR500, TP-LINK CR700, TP-LINK CR1900, SMC D3CM1604, Zoom 5370, and products that operate in a similar manner (“Accused Cable Modem Products”), as well as the Arris AX013ANC STB, Arris AX013ANM STB, Pace PX022ANC STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM STB, and products that operate in a similar manner (“Accused Set Top Products”). Cox provides cable television and internet services (“Accused Services”) via the lease, sale, and/or distribution of the Accused Cable Modem Products and/or the Accused Set Top Products. Cox literally and/or under the doctrine of equivalents infringes the claims of the ’775 Patent by making, using, selling, offering for sale, and/or importing the Accused Services, Accused Cable Modem Products, and/or the Accused Set Top Products.


As shown below in the chart with exemplary support, the Accused Services infringe at least claims 18 and 19 of U.S. Patent No. 8,223,775 (“’775 Patent”). The ’775 Patent was filed September 30, 2003, issued July 17, 2012, and is entitled “Architecture for a Flexible and High-Performance Gateway Cable Modem.”

The Accused Services are provided by the claimed cable modem system by utilizing, for example, at least one Accused Cable Modem Product located at each subscriber location. The Accused Cable Modem Products infringe the claims of the ’775 Patent, as described below, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b)–(c).

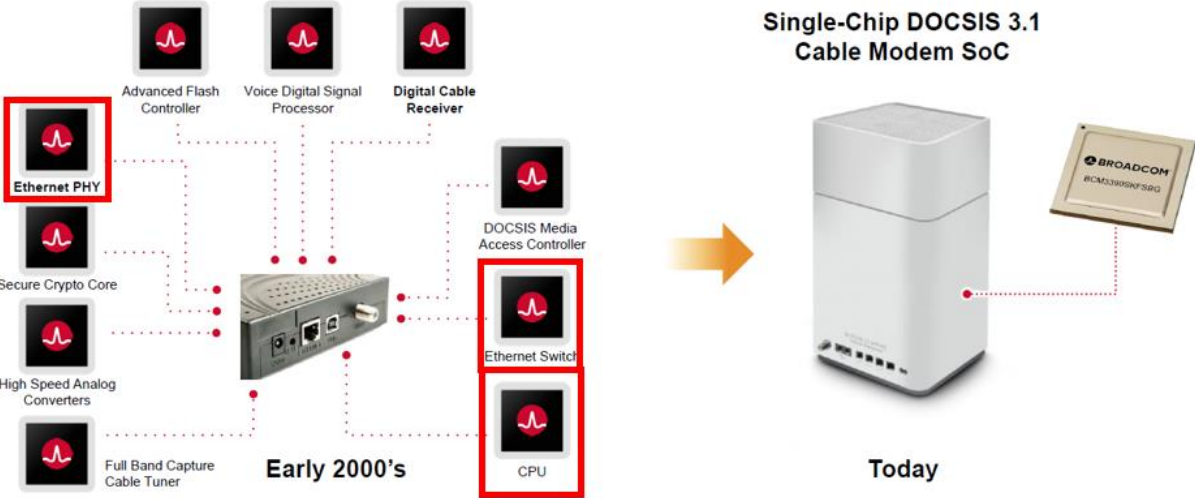
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#	U.S. Patent No. 8,223,775	Accused Products and Services
<b>18pre</b>	A cable modem system comprising:	<p>The Accused Services are provided by the claimed cable modem system by utilizing, for example, at least one Accused Cable Modem Product located at each subscriber location, including, for example, the Technicolor CGM4981, Technicolor CGM4331, Technicolor CGM4141, Technicolor CVA4004, ARRIS / Surfboard TM3402, ARRIS / Surfboard G36, ARRIS / Surfboard G54, ARRIS / Surfboard S33, ARRIS / Surfboard CM8200, ARRIS / Surfboard G34, ARRIS / Surfboard SB8200, ARRIS / Surfboard DG2460, ARRIS TM9202, Hitron CODA56, Hitron CODA, Humax HGD310, Motorola B12, Motorola MB8611, Motorola MG8725, Motorola MB8600, Motorola MG8702, Netgear CM2000, Netgear C7800, Netgear CAX30, Netgear CAX80, Netgear CBR750, Netgear CM1000, Netgear CM1000v2, Netgear CM1100, Netgear CM1200, Netgear CM2500, Netgear CM3000, Ubiquiti UCI, ARRIS / Surfboard TG2472, ARRIS / Surfboard SBG7400AC2, ARRIS / Surfboard SBG7600AC2, Motorola MB7621, Motorola MG7700, Netgear C6900, Netgear C7000v2, Netgear C7500, Netgear CBR40, Netgear CM600, Netgear CM700, TP-LINK TC-7650 and products that operate in a similar manner.</p> <p>By way of example, the Technicolor CGM4141 cable modem is charted herein. On information and belief, all of these devices include similar chipsets and have identical or substantially identical operation, such that they all infringe the '775 patent in the same manner as charted.</p>
<b>18a</b>	a data networking engine implemented in a first circuit that includes at least one processor, the data networking engine programmed with software that when executed by the at least one processor of the first circuit causes the data networking engine to perform home networking functions	<p>The Accused Cable Modem Products include a data networking engine implemented in a first circuit that includes at least one processor, the data networking engine programmed with software that when executed by the at least one processor of the first circuit causes the data networking engine to perform home networking functions including interfacing with customer provided equipment as described below.</p> <p>Specifically, the Technicolor CGM4141 includes circuitry and/or applicable software modules constituting a data networking engine. For example, the Technicolor CGM4141 has a Broadcom BCM3390 SoC.</p>

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	including interfacing with customer provided equipment;	<div data-bbox="705 250 1866 1122"></div> <p data-bbox="699 1177 1944 1375">The Technicolor CGM4141, via at least in part by the Broadcom BCM3390, any other circuitry, and/or applicable software modules, has a dedicated cable modem CPU, a dedicated multi-threaded applications processor, and multiple hardware off-load engines. The multi-threaded applications processor implements a data networking engine. The data networking engine performs home networking functions including interfacing with customer provided equipment. For</p>

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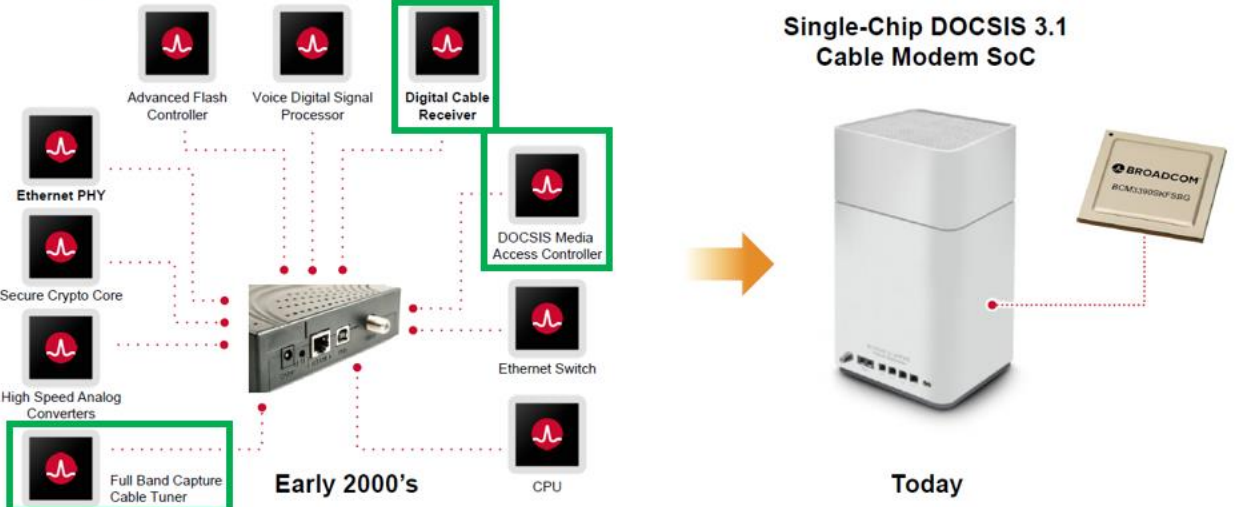
#	U.S. Patent No. 8,223,775	Accused Products and Services
		<p>example, on informed belief, the BCM3390 includes applicable circuitry and/or software modules constituting at least a CPU, an Ethernet PHY, and/or an Ethernet switch, highlighted in red below.</p> <p><b>Integration Drives Improved Performance, Cost and Power</b></p>  <p>(ENTROPIC_COX_001972 at ENTROPIC_COX_001989, annotated)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
18b	a cable modem engine implemented in a second circuit that includes at least one processor, the second circuit being separate from the first	<p>The Accused Cable Modem Products have a cable modem engine implemented in a second circuit that includes at least one processor, the second circuit being separate from the first circuit, the cable modem engine programmed with software that when executed by the at least one processor of the second circuit causes the cable modem engine to perform cable modem functions other than the home networking functions performed by the data networking engine, the cable modem</p>

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	<p>circuit, the cable modem engine programmed with software that when executed by the at least one processor of the second circuit causes the cable modem engine to perform cable modem functions other than the home networking functions performed by the data networking engine, the cable modem functions including interfacing with cable media, and the cable modem engine configured to enable upgrades to its software in a manner that is independent of upgrades to the software of the data networking engine, the cable modem engine including a DOCSIS controller and a DOCSIS MAC processor, the DOCSIS MAC processor configured to process downstream PDU packets and forward the processed packets directly to the data networking engine without the involvement of the DOCSIS controller in</p>	<p>functions including interfacing with cable media, and the cable modem engine configured to enable upgrades to its software in a manner that is independent of upgrades to the software of the data networking engine, the cable modem engine including a DOCSIS controller and a DOCSIS MAC processor, the DOCSIS MAC processor configured to process downstream PDU packets and forward the processed packets directly to the data networking engine without the involvement of the DOCSIS controller in order to boost downstream throughput as described below.</p> <p>Specifically, the Technicolor CGM4141 includes circuitry and/or applicable software modules constituting a dedicated cable modem CPU, a dedicated multi-threaded applications processor, and multiple hardware off-load engines. The cable modem CPU provides a cable modem engine. The cable modem CPU is separate from the multi-threaded applications processor and the hardware off-load engines. On informed belief, the cable modem CPU utilizes an eCOS operating system and the multi-threaded applications processor utilizes a Linux operating system. Accordingly, upgrades to the cable modem engine are independent of upgrades to the data networking engine. The cable modem CPU implements the cable modem engine. Upon information and belief, the cable modem engine includes a DOCSIS controller and a DOCSIS MAC processor, the DOCSIS MAC processor configured to process downstream PDU packets and forward the processed packets directly to the data networking engine without the involvement of the DOCSIS controller in order to boost downstream throughput. For example, on informed belief, the BCM3390 includes applicable circuitry and/or software modules constituting at least a full band capture cable tuner, a DOCSIS Media Access Controller, and an digital cable receiver, highlighted in green below.</p>

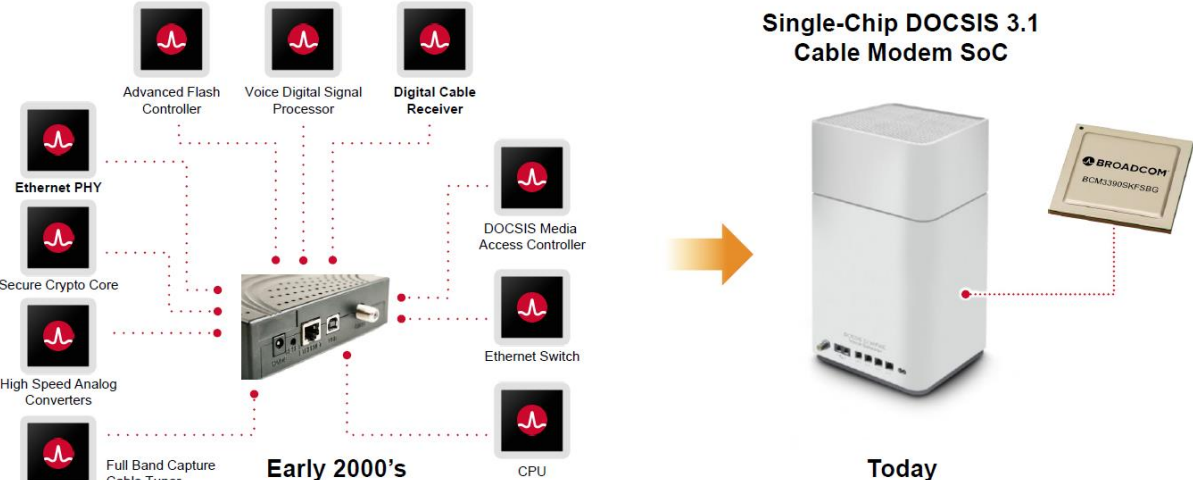


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	<p>order to boost downstream throughput; and</p>	<p><b>Integration Drives Improved Performance, Cost and Power</b></p>  <p>(ENTROPIC_COX_001972 at ENTROPIC_COX_001989, annotated)</p> <p>bcm3390</p> <p>Known platforms:</p> <ul style="list-style-type: none"> <li>• Motorola/Arris/Commscope SB8200/CM8200 (Linux kernel + eCos source: <a href="#">Commscope SourceForge 8200</a>)</li> </ul> <p>(ENTROPIC_COX_001921 at ENTROPIC_COX_001926)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>



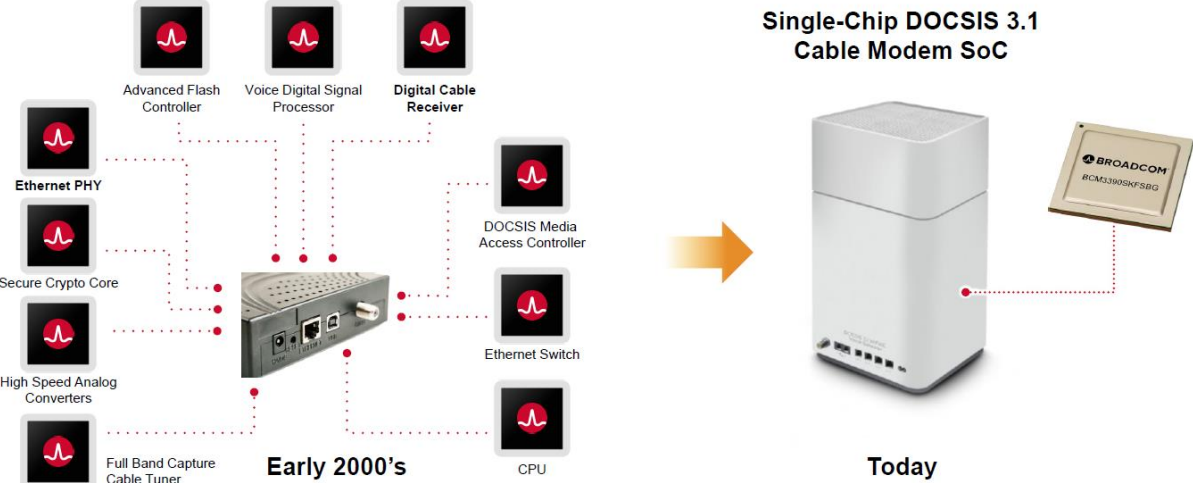
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18c	<p>a data bus that connects the data networking engine to the cable modem engine, wherein the cable modem functions performed by the cable modem engine are completely partitioned from the home networking functions performed by the data networking engine.</p>	<p>The Accused Cable Modem Products have a data bus that connects the data networking engine to the cable modem engine, wherein the cable modem functions performed by the cable modem engine are completely partitioned from the home networking functions performed by the data networking engine as described below.</p> <p>Specifically, the Technicolor CGM4141 includes circuitry and/or applicable software modules constituting a dedicated cable modem CPU, a dedicated multi-threaded applications processor, and multiple hardware off-load engines. The multi-threaded applications processor provides the data networking engine and the cable modem CPU provides the cable modem engine. The cable modem CPU is separate from, the multi-threaded applications processor. Accordingly, the cable modem functions performed by the cable modem engine are completely partitioned from the home networking functions performed by the data networking engine. On informed belief, the cable modem CPU communicates with the multi-threaded applications processor using a data bus. Accordingly, the data bus connects the data networking engine and the cable modem engine.</p> <div data-bbox="730 867 1793 907" style="text-align: center;"> <p><b>Integration Drives Improved Performance, Cost and Power</b></p> </div>  <p style="text-align: center;"><b>Early 2000's</b> <span style="margin-left: 200px;"><b>Today</b></span></p>

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#	U.S. Patent No. 8,223,775	Accused Products and Services
		<p>(ENTROPIC_COX_001972 at ENTROPIC_COX_001989)</p> <p><b>bcm3390</b></p> <hr/> <p>Known platforms:</p> <ul style="list-style-type: none"><li>• Motorola/Arris/Commscope SB8200/CM8200 (Linux kernel + eCos source: <a href="#">Commscope SourceForge 8200</a>)</li></ul> <p>(ENTROPIC_COX_001921 at ENTROPIC_COX_001926)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
<b>19</b>	A cable modem system as claimed in claim 18, wherein all DOCSIS functions are localized in the cable modem engine.	<p>In the Accused Cable Modem Products, all DOCSIS functions are localized in the cable modem engine as described below.</p> <p>Specifically, the Technicolor CGM4141 includes circuitry and/or applicable software modules constituting a dedicated cable modem CPU, a dedicated multi-threaded applications processor, and multiple hardware off-load engines. On informed belief, the DOCSIS functions are localized in the cable modem CPU.</p>

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		<p data-bbox="730 237 1793 277"><b>Integration Drives Improved Performance, Cost and Power</b></p>  <p data-bbox="695 800 1459 833">(ENTROPIC_COX_001972 at ENTROPIC_COX_001989)</p> <p data-bbox="705 889 867 927"><b>bcm3390</b></p> <p data-bbox="705 976 882 1000">Known platforms:</p> <ul data-bbox="743 1024 1858 1049" style="list-style-type: none"> <li>• Motorola/Arris/Commscope SB8200/CM8200 (Linux kernel + eCos source: <a href="#">Commscope SourceForge 8200</a>)</li> </ul> <p data-bbox="695 1078 1459 1110">(ENTROPIC_COX_001921 at ENTROPIC_COX_001926)</p> <p data-bbox="695 1162 1942 1317">Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>